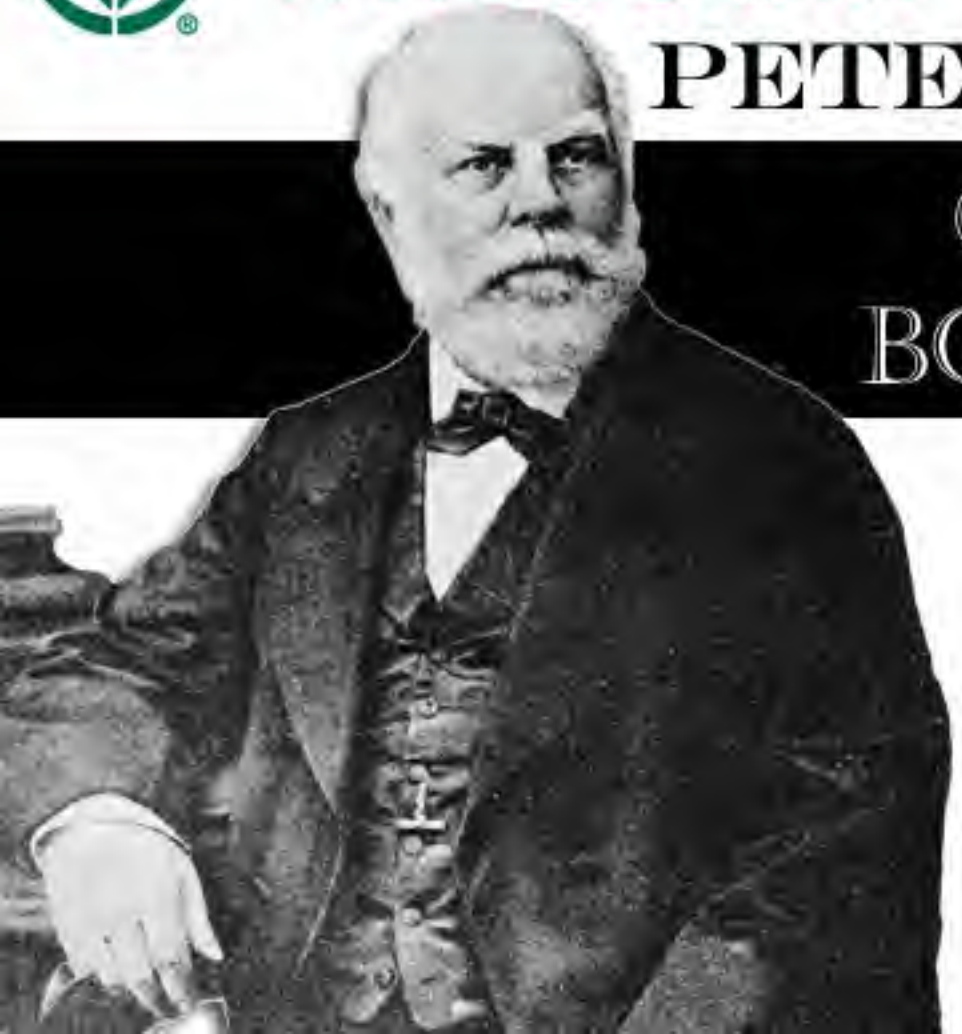
Missouri Botanical Garden
Peter H. Raven Library

George Engelmann Botanical Notebooks



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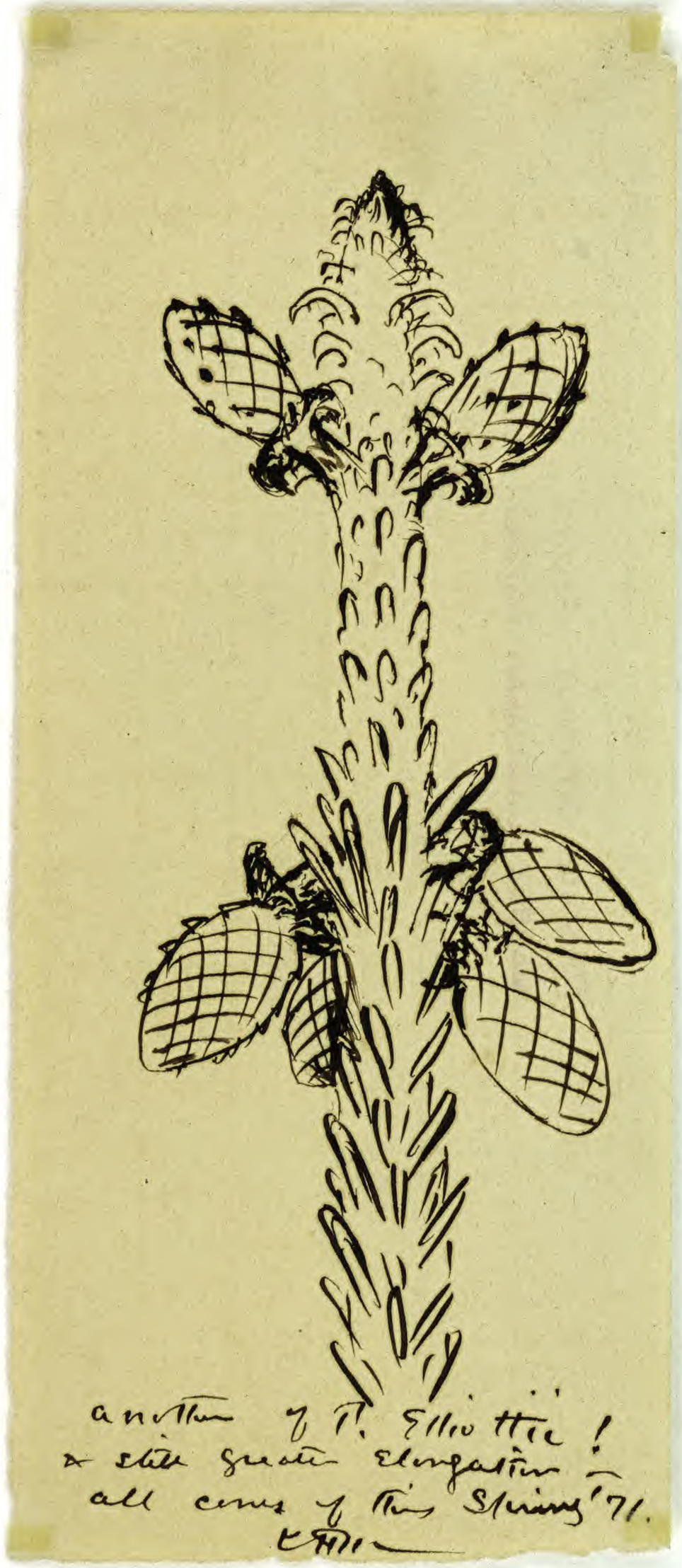
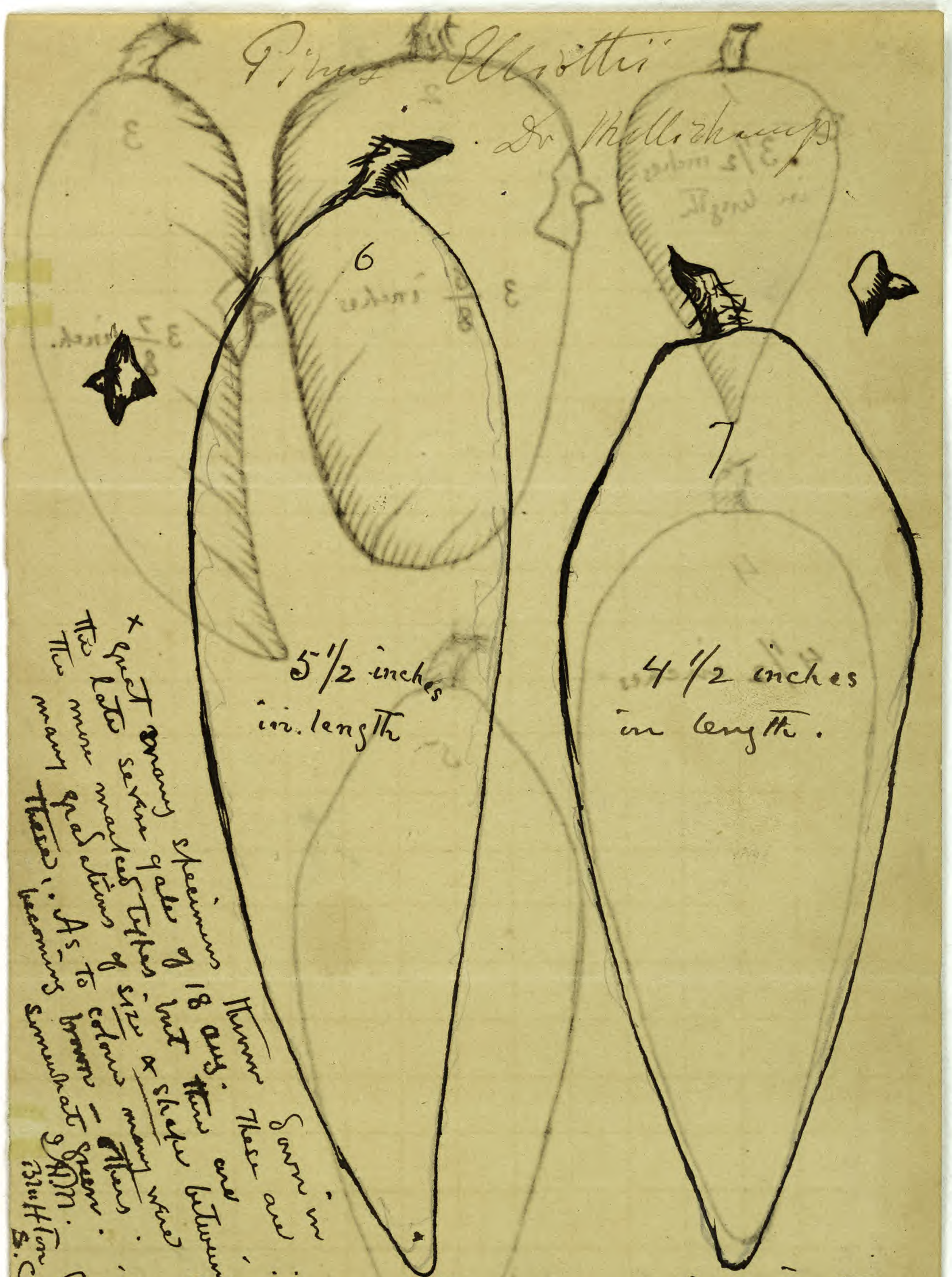


Pinus Elliottii

Dr Mellichamp



Some in these are

Thus specimens of 18 aug. Thus are between

× quite many specimens of the late seven years, but a single tree

The late more mature specimens of size & colour many were

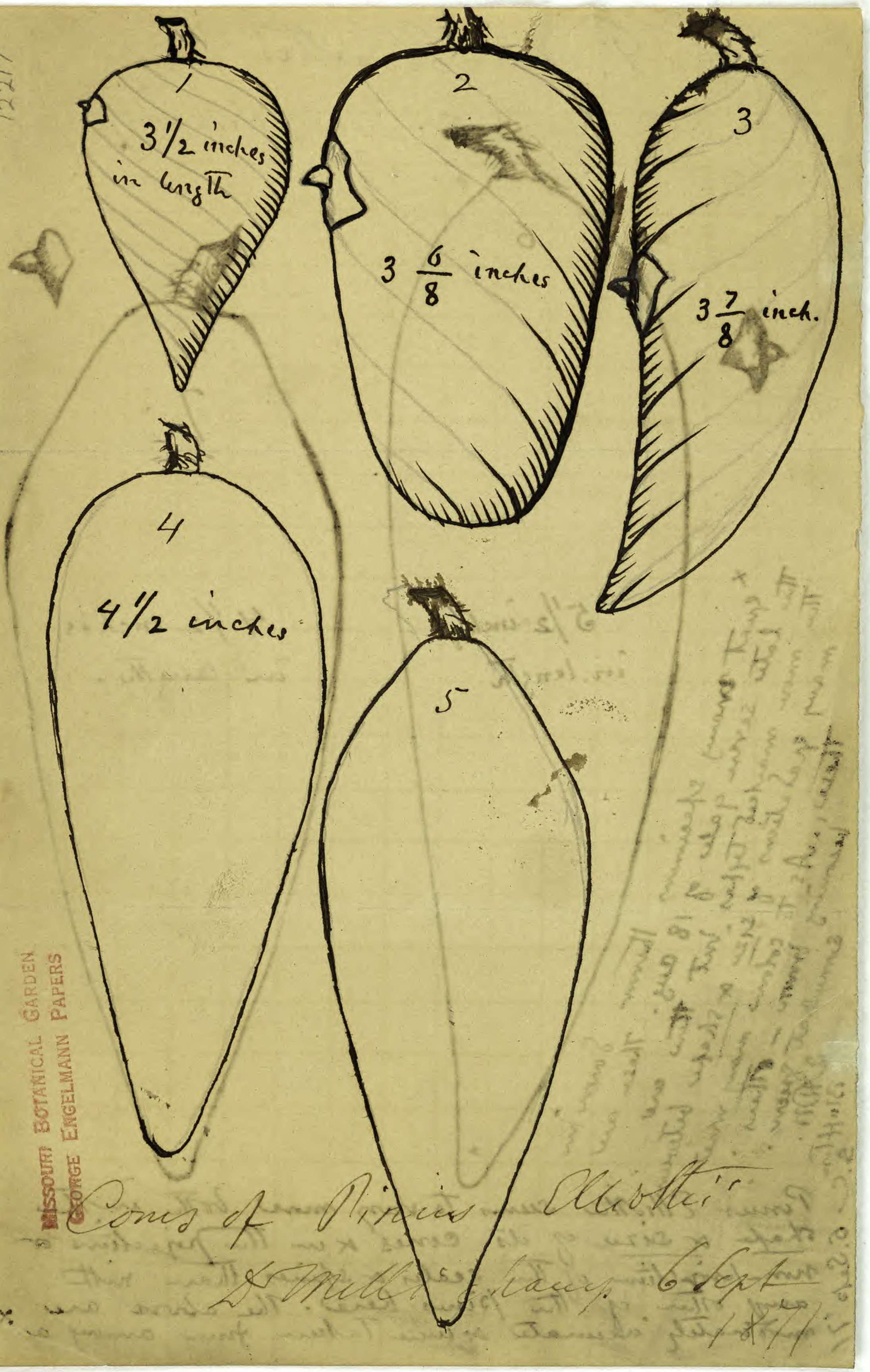
The many gradations of size & colour ~~many~~ Thus

As to ~~Thus~~ brown = green.

Specimens ... somewhat g. Dr. Mellichamp

Hilton S.C.

Pinus Elliottii seems to vary more both in the shape & size of its cones & in the projection or non-projection of the scales & spines than with any other of the pines here. The above are moderately accurate & were taken from among a ×



Cons of Pinus Elliottii
L. Mulldenberg 6 Sept 1877

Dr Mellichamp April 1872 writes:

all Pinus Elliottii had discharged their Pollen by March 1st while P. australis was fully a month later – and the others still later.

This season is unusually late – winter long and cold

1876 P. Elliottii discharged Pollen in January

t side of lot & one side
oats, tree boxes 2 cts
e cellar window guards
t cellar windows to
windows to be varnished
spouts to be painted
, & side door west, in basement
e sum of Two
e $275 00/100 dollars
ctfully &c
r A Thornburgh & Co

Specimen of P. Elliottii wood cut by
Dr Mellichamp Aug 1877

Heartwood 7 Transverse rings 28 mm
" 44
each ring therefore average 4 mm
single rings in widest part 5
narrowest 3

Sapwood 15 annual rings 10 mm
each ring therefore average 0.6
single rings measured
widest 1.3
narrowest 0.2

Actual measurement of a tree by Dr Mellichamp. 0.20

Diam. 2½ inches sap 60-70 rings
15 lines semidiameter or radius each ring 0.5 mm

Diam 19 inches heart 74 rings
9½ " = 114 lines radius each ring 3.0 mm

over

Over

12219

Leitch & Corlies
DRUGGISTS
South West Corner Fifth and Market Streets.

Sap: annul rings on average
1/4 line would make the
whole tree of 130 lines radius
520 years old,

while the 2 lines of the
old wood rings would make
it only 65 years old,

Dr Mellichamp counts
60 ring sap
74 " heartwood
134 years age !!

In 1874 P. Elliottii is discharging
Pollen as early as 5th – 10th February.

D. Mellichamp

12220

"Yellow Pine", Pinus Taeda
from the Bahamas
in Miss Rew
is probably P. Elliottii or Caribaeis
cone 4 inches long

12221

Isoetes Sporgeni Asp

Westonii Nuphar Stellaria Bor Plantago

Pyrola secunda Rhododendron Juniper communis

9. mbr – alba – alba x Bor alba x macro

sinuosum (small)

P. Elliottii, the most common pine in S. Florida composing the immense Pine forests of that region, "Short-Straw Pine" — wood much harder to work than australis, taller, more slender.

Dr Gabb 1878

P. australis "long-straw pine" is the forest Pine of eastern and middle & north Florida, not seen south of Tampa

Monsieur et honorable Collègue!

Le 5. Aout 1879. il y aura 40 ans, l'immortel Endlicher dans le Novarum Stirpium Decas X. p. 89.

„honoribus viri clarissimi SAMUELIS BRASSAI apud Claudiopolitanos in Transylvania Botanicam profitentis, qui solus, popularibus suis tritam a Linneanis viam adusque terentibus, rei herbariae methodum naturalem libris praeclaris, hungarico sermone conscriptis, adserere conatur“

dediait le genre des Araliacées

BRASSAIA.

Il est bien rare de voir un auteur, ayant depuis si longtemps déjà atteint les plus hauts honneurs, comme botaniste, paraitre encore parmi les vivants dans toute sa force d'esprit.

Pour procurer un jour de joie à cet homme de mérite, nous venons faire appel à nos collègues, certains d'avance qu 'ils voudront bien se joindre à notre manifestation.

Nous avons considéré comme le plus convenable d'offrir au

Elliottii never over 9, often
7–8 cotyledons, sometimes 6, never less.

Dr Mellichamp April 1872

Washington University.

Social Reunion,

Mr 3 plates of Elliottii
1878
(1250 plates of each
cost me for the set
Artist [redacted] 20.
Printer 15.
& pap
each copy of 3 plates: 35

OFFICE OF
F. A. REUSS & CO.

St. Louis, den 7 Mai 1878

Geehrter Herr Doctor!

Ich habe hiermit die traurige Pflicht zu erfüllen Sie von dem Tode des Onkels

1872

Pinus Ellottii blooming Feb 25 – March 3d

3 or 4 weeks earlier than any other Pine

P. australis – bloom end of March & first of April. –

P. Ellottii germinates with 7–8 rarely 6, very often 9 cotyledons no other numbers seen.

P. glabra usually 5, often 6 once 4 cotyledons.

12225

Pinus Elliottii

male aments already
showing their beautiful
violet tinge

Decemb 12th 1872

Newell Chaney

e und ihre schätz-
barst. Sie kann
Ihr Ihrem
gern, aber auf meine
Reise-Arbeit
in Betracht.
Ich freue mich
ich sie in einigen
Wochen zurückzusenden
und nehme Sie
Hochachtend
Ihr Dr. Engelmann

C. Elliottii

young cones form little crosses in April – on the naked axis

a month later, end of May they are strongly recurved but leaves not yet developed

12227

Pinus Elliottii

Dr M. writes: In 1872 I observed no tree wafting pollen before Febr 28 yet in 1873 Febr 15 or even earlier was the time; on Febr 24 the Dr. Amerty begins to drop.

On vigorous sapling many branches bore three tufts of cones; also in Pack & Sessler, never in earlier male & female flowers on same axis in same season in every tree — also seen in Pack

CHAS. HABICHT & CO.,

Successors to ENNO SANDER & Co.,

Pharmaceutists,

Walnut & Fourth Sts., SOUTHERN HOTEL,

Walnut & Second Sts., BARNUM'S HOTEL,

ST. LOUIS, MO.

1873 Bluffs S. C. Co.

P. Elliottii discharging Pollen
Febr 15

P. Teda March 20

P. australis — 25

P. glabra soon afterwards

P. mitis } later

P. serotina } about same time
or mitis a little later

P. australis & P. Elliottii have
deep purple anthers
the others green ones

Dear Sir:

one Case of Plants

addressed to you, has arrived per Steamer

Batavia

from Liverpool.

The same is consigned to us, and has been held for duties. Please inform us promptly if we shall pay duty, and also send invoice and shipping instructions.

Please reply on back of this sheet.

AUSTIN BALDWIN & CO.

N. B.—Bills of Exchange on the City Bank, London, Paris, and all the principal Cities of Europe, issued at our Banking Office, No. 74 Broadway.

[Honstonia Patens. Ell.]

Rec^d March 1st

Bluffton Mo
24 Feb 73

To
Dr G Engelmann
St Louis

My dear Sir

Your last letters of 6 Jan & 14 Feb came to hand in due time, — the former I expected to answer when I shd next send anything — but yr last wh I rec^d on the 21st hurries me up! Well

I am sorry to say that you are not quite up to time with Pinus Ell.! You shd have written me earlier, for altho' last season I observed no tree waft^g pollen until the 28th Feb & in mch — yet this season I suppose the 15th of Feb. or even earlier might be set down as the time. Now the male amts are all open & touching — even dispersing & the pollen discharg^d. I have however fixed up for Mr Parlan Potter a package containing 1st a specimen from a tree cut on the 31st Jan, the amts still erect & firm & retaining their violet hue but wh wd not have matured until the 10th (branches) or 15th Feb — also other male fls & from a tree wh I believe was cut about the 15th — the pollen of wh is now discharging — also one or two branches (tho' you did not request it) of the fertile amts or young cones of this spring.

a simple sapling in an old "brown grass" field

Mr Sargent — young shoots of P. Mitis — also young cones by 2 & 3

I've also written him a few words Explana-
-tory. There is always an elongation of
the axis beyond the cluster of male flrs so
far as I have observed — on the old trees
about an inch or thereabouts — on the younger
two inches & even I believe on vigorous &
unhampered saplings some 5 or 6 inches or
more. In a very old tree it may be only
an effort & that is all. Already you may
see a kind of umbilical projection beyond the
flrs — of about an inch & even 2 inches as I
satisfied myself to day in examining a sapling.
Thus —  . The same tho' in a lesser de-
gree I think with P. australis. The
usual length of the ♂ inflorescence in most
spec: of P. Ell is about an inch, — in a
young sapling more, an inch & 3/4 — perhaps
2 inches, but certainly not more. About the
same in P. australis. I send you also a
package containing spec: from tree of 15 feet (?)
also another fully extended or 22 feet, & still
another beautiful one from same tree (22 feet)
showing cones of '71 (or rather where they have been!)
— cones of '72 & the exquisitely tender pink or
purple ones of '73 — all on same branch —
I had to separate them, you can join.
Had you written me earlier I could have
done better by Mr P. Roether: I have
some very fine spec: from tree cut on 31. I am
now almost dried up & another time I'll
send you if you care to have them for
any European correspondents — at the same
time shall send fine spec: of Bark
with flakes of P. Ell hacked on halves &
also the germinating seeds of P. australis from

(Of course you are well aware of this occasionally very marked elongation of branch of young P. Ell, in the

incipiency to the midsummer growth. Bye the bye that reminds me that upon still further examination of P. Australis I find that the first two leaves are generally but 2 leaves instead of 3. If you examine those I long ago sent you I think you'll find it the case — but I shall send you others, I am referring to its condition when still tuft-like. Sorry to hear that you cannot lay your hands on Acerat X for — no more until June — July — if then! Fearing that my two plants on the edge of a cotton field will be cut up this spring I dug them up in the winter & planted them in a box. I will gladly send you one, but I fear that it will not survive the mails, so shall look it "to make sure"! The root I can hardly call tuberous — but it is irregular — if you place you may call it irregularly tub — crows — runs down 6 — 8 inches. I have never examined the root of Asclet. Tub. — I'd be delighted to see that Yucca Bark — but I advise you not to trust it to the tender mercies of the "Sacr-r-r-r-r-r-r-r-r-r-r-r-r-r-r-é Stables" of the P.O. — the especial pets of the Yankee concern at Washington! Yes! you may well smile at my letters & the indications of my tardy growth & progress, — still 'tis a progress for my eye is now better trained tho' hardly my head! — and therefore I still stick up for my at anyrate well marked "Varieties". The thought of your looking over my poor letters & seeing again the trash & utterly irrelevant stuff wh. upon the spur of the moment I have had the folly & hardihood to write you fills me really with some confusion of face — "dead men tell no tales" — I wish you wd. now check them in the fire. Yes! you mentioned to me that peculiarity of the P. Conquistabol. seedling

Now whether my subterr. stem of Y. flaccida was a seedling I cant say — certain it is that there were other young plants of same near, but this one only showed that peculiarity! Never as you know have I seen fruit — a darkey friend from Hatt brought me fleshy stalk of Y. f. — last fall, said they had no "bananas" like "Penny Royall" as he called Y. al. (Penny Royal — or "Pametto (Palmetto) Royall") but "pods"! I think he was re--ferring to Y. f. — but who knows but that he is right? What you state as to the roots of the Mexican species is new to me. I shall dig up some roots of Asclep. Tub. to compare with Aerial. X fix. & report. Don't be afraid of the Pink Pot seed — they are good — tho' the Cabinets may not have burst — they were turning brown & were really mature. You can easily raise them in a box of damp earth — (woodland). The Cannas flace. is I think worth looking after — "not" creep-ing along — not tuberous or bulbous. I forgot to say that ~~[illegible]~~ that I've ~~[illegible]~~ seldom seen any subterr. stem of Y. flaccida pushing out from the main trunks but this is commonly the case ~~with~~ or very frequently with Y. flac. & therefore you generally see them in a cluster — the stems all bunched together & it's difficult sometimes to say wh. is the main stem

P.S. I need hardly say in answer to yr. proposition to send me one or two of yr. "dry" contributions that I wd. read anything from yr. pen with int. & pleasure & wd. thank you besides.

Very respy.

J. H. M.

Rec March 25
Ans May 23

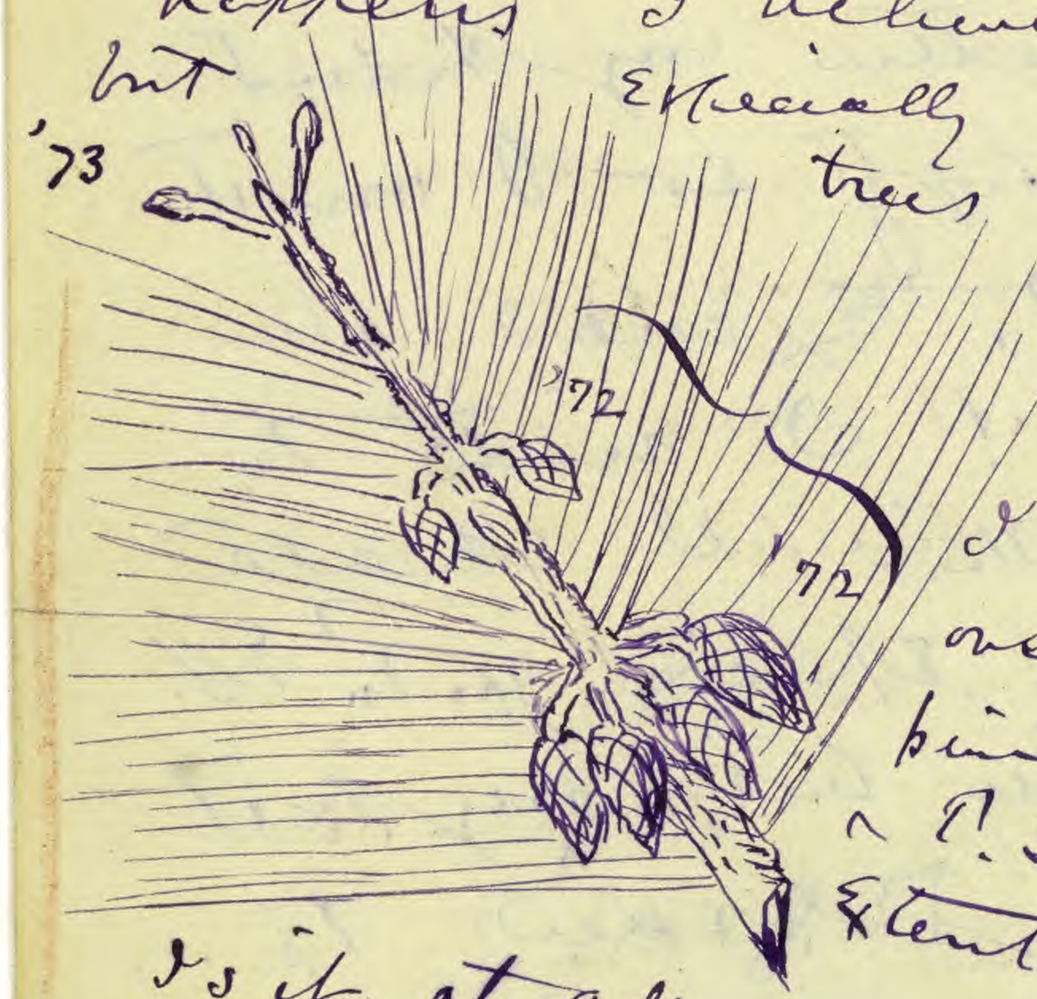
Bloomington
29. Mar 73

Dr Engelmann

My dear

You will doubtless wonder to see another note following so closely on the heels of the one sent last mail, — the calligraphy of which I fear you will have found difficult to make out! — as for that matter my hand is still very stiff so I must beg your pardon, & excuse the "fowl-scratching"! I write to say that with this I shall mail a single specn of Ill. Sh. which doubtless will be my last furnishing cup-fungus to that genus, & as the one referred to is especially fine I determined to send it! It comes from a young tree, a sapling growing with only 2 or 3 others in an old "blue grass field", — so that it had full room & verge enough to grow as seemed to it best, — taking as it did

not fail to do — the sunshine into its blood & the wind into its pulses — as Mr Lowell would say!! This sapling of some 20–25 feet is so luxuriant & vigorous that most of the cones are doubled, — I mean that there is a very general elongation of the axis after the putting forth of the first cones — wh are again repeated. This for last year. This happens I believe with all pines but especially so in young & vigorous trees of P. Ell — tho' I had never seen it to this extent before. If I mistake not I have only observed it in 2 other pines here viz P. Taeda & P. Serot, & to a very limited extent — never in P. Australis



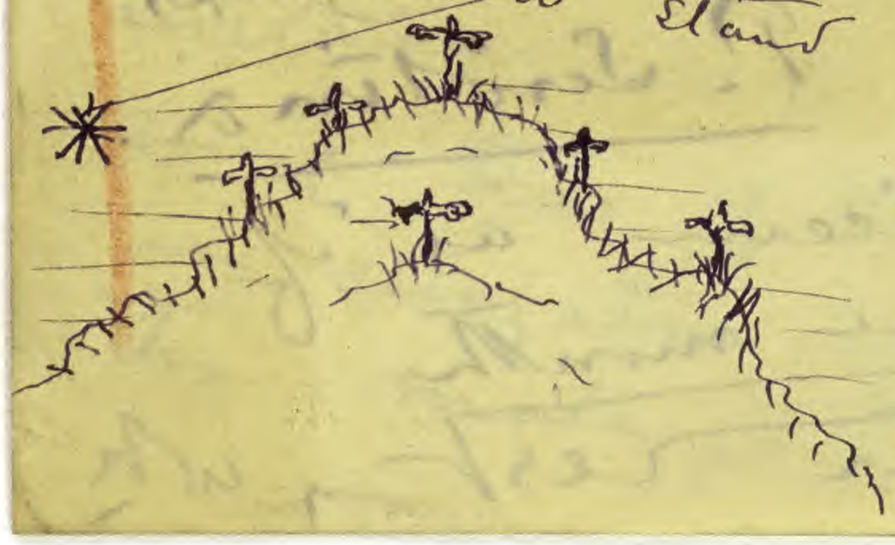
Is it at all usual that the female cones or young cones shed at bear upon the elongation of the branchlet having male cones? — Thus? I think I observed some with this spring in 2 instances with P. Ell. & P. Taeda, young trees of P. Ell. or 3. On the one there is an elongation of some 2 inches beyond the male flowers & always terminating

upwards. There are indications that these shoots will be clothed with leaves. I think that P. Teda has a more ~~very~~ marked tendency to this elongation than any other of our Pines. P. Australis is probably now maturing & I judge just commencing to discharge its pollen — certainly P. Teda — as I satisfied myself yesterday — the ants quite are now golden — making quite a show! — ; P. Aust as you well know of a deep purple lilac P. Ell. still later blooms as I've often told you P. glabra, — tho' not very far behind P. Aus. & P. Ted. but as you will see from the small specimen I send you in the package P. mitis is a laggard in the race wh. leads pace with or perhaps even a little behind P. Serotina. This year it will seem as if P. Ell is full one month a-head of all the rest; wh.

of itself is enough to separate it from all others. I believe I have hardly said anything in this MS. I've not repeated before but there's nothing like tripping an observation every season — it does no harm at any-rate! I enclose a leaf or two of the aforesaid. Perennis (?) I repeat it was growing on a causeway opposite Saramet, also 2 or 3 flks of a lily found in an old garden here-abouts (seed in package) The idea to know as I have never seen it anywhere else. I suppose it came originally from the North.

The cutting of a few new trees (saplings) of P. Ell is already full of little crosses, most of them however stand thus

the arms not yet straightened out.



J. F. Meacham

(3) To Dr. Geo. Engelmann — Bluffton Mo 14 March '71

Rec March 21st
Ans — 24

My dear Dr.

I send by this mail a package of Compositae, & all well represented to the as to stems & foliage & amounts save "P. Miltis" & "P. Serotina" both of which are far behind the rest as I write & therefore somewhat imperfectly represented. But, when I can get good specimens shall send them also. I wish to call yr. attention especially to a Pine at for the present I designate as "Unknown, P. Rigida ?" (E 11) & wh. especially struck me last fall on act. of the peculiarity of the cone dropping much earlier & more abundantly than the others. I sent it to Mr. Ravenel with notes (such as they are !!) & asked him if this was Ellis's P. Rigida? He says it is new to him. I found it both in Sandy soil on the River & also in the low ground near the P. Serotina, tho' it is not so abt. to be found in the wet places & ponds as the latter. I have never often seen them growing side by side. In damp pine-barrens it becomes a large tree — as tall as the P. Australis"

(4) but in the sandy soil immediately about me it is a middle-sized tree. Generally 2 leaves tho' I have found them rarely with 3 leaves. It blooms as I told you in my last much earlier than the others — by the middle of Feb. of this yr (an early spring however) the aments were well formed, almost perfect, & yesterday they were displaying, the pollen having already been wafted in every direction & the woods & roads sulphur splashed in every direction. The trunks of this pine have a reddish look — more so than P. Australis, from the rather dec-
-ortication of the lamina wh is peeled off in larger flakes & thinner than P. Australis. (Elliott says something about this in con-
-nection with V. Heterophylla of wh however he gives a most confused acct!) On the little low flat islands of the marsh covered with Sam palmetto &c (Salal Ser.) this pine sometimes flourishes all others but in such situations they are of course more stunted than on the higher land! The grain of the wood is coarser like "P. Tæda" but not so soft & spongy & appears to yield a ~~[illegible]~~ quantity of gum when cut. A lumber man told me that al-
-though he always preferred to cut the yellow pine — "P. Australis", yet — ~~that~~ the timber was good & was seldom found ~~too~~ "wind-shaken" as in the latter. In light land (with plenty of moss) it is a middle sized but rather & sober looking tree (if you can understand my phrase) much branched & standing firm against to all the winds that blow" but in low ground it runs up to a considerable height & then has but a few pathos crooked branches at the top!

5

The early dropping of the cones, & the discharge of the 4 mast^s — the abundance of pollen — 2–3 heavy — exfoliations of bark in larger flakes than australis, and the remarkable renewing of the young cones in April & May

I would place "Elliottii" between australis and serotina.

L. H. McKicham

and if the description of the inflorescence of A. Cope
Rly Darobi (Agav p. 202) is to be relied on, when it is
said that the middle peduncle
is of a line longer
than the lateral ones
conveniently furnish.
and even if the median flower
may be an abortive

Very Respectfully

Your Obedt. Servant

W L Nicholson

Please to excuse the above not being written
as a holograph with my own hand – being temporarily
disabled by the effects of a severe illness.

Rec March 10th
Ans same day & 11th Bluffton Mo
3 mo 1871

To Dr Geo: Engelmann

Dr Sir —

I enclose a specimen of the P. glabra wh you requested me to send when in bloom. I conclude the aments are sterile — the pentels I believe appearing somewhat later, but on any pine it is I imagine rather difficult to obtain the last unless the tree be cut. I found some 8 or 10 of these pines growing at the head of a little "cove" on Marys River, among live oaks, Magnolias, Cedars & Palmettos & a beautiful spot it was, — a fit haunt for the wood nymphs & Hamadryads of ancient Greek days!

The P. glabra is certainly a most symmetrical tree & well worthy of a place on some rich man's Lawn. In a letter not long since recd from Mr Ravenel he advises me to send you the aments &c of the Pond Pine (P. serotina). I shall do so if you desire it & also of the others found here. I find a considerable difference in their time of flowering — the P. serotina still mentioned being seemingly the laggard in the race, at least after a good search yesterday when I had an opportunity of examining all of the pines I was not able to find any.

Would you care to hear a note wh I made yesterday as regards the time of flowering of the Pines about Hs?

2. mo 1871. "The aments of an unknown Pine (perhaps the P. Rigida of Elliott) have for some time past been dropping from the trees & their pollen wafted away, & sulphuring over the roofs & roadsides in every direction, and to day one of these trees having been cut, I found many little cones of a

* Hilton Head (3/11/2)

beautiful rose-colour! The cones of the Spring of 1870 on the same tree were numerous & still quite small. About the middle of February I was surprised to find the aments of the same kind (P. Rigida?) already well formed, & of a beautiful violet — perhaps 2 weeks or more in advance of all the other pines! — and this precocity corresponds well with what I observed last fall — viz, that their cones commenced to drop much earlier & more abundantly than the rest! At this date after an Examination of the Yellow Pine (P. Australis) I wld say that it comes next in forwardness, the aments now being in some cases apparently perfectly formed, but I do not think that the pollen has yet been discharged. Next, & a little later comes P. Tæda (Loblolly), & still perhaps a little in delay — P. Glabra. Then P. Mitis however wh I've also looked often this day are very much behind hand — their aments seeming just beginning to form, & as for the Pond Pine (P. Serotina) I cld hardly discover that they had at all felt the "subtle influences" of the Spring Season; — from what I cld discover I do not think they will be in bloom for two weeks yet or more.

Colour of aments of (P. Rigida?) violet
P. Australis "
P. Tæda yellow
P. Glabra rose-colour } (perhaps Eventually becoming violet)
P. Mitis — too early to say
P. Serotina " " "

All this may be very superfluous, especially as you did not request me to say anything about Pines — but as I was sending a specimen I thought perhaps it might not be entirely flat! The dried aments in this letter are from the same unknown Pine (P. R.?) wh now shows the scaddies, & the young & tender cones of rose-colour are from the same, with leaves. I believe Mr S— has sent you a specimen.

P.S. Box not come yet! Trying a receipt

E. A. Rauenhampe